

Serial Number: 10/087,190**ENTERED**

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: _____
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☒ Deleted: ☒ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☐ Other: _____

Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.



OIKE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/087,190

DATE: 01/14/2003

TIME: 14:17:25

Input Set : N:\AMC\087190.txt

Output Set: N:\CRF4\02192003\J087190.raw

4 <110> APPLICANT: Agensys, Inc.
5 Challita-Eid, Pia M.
6 Hubert, Rene S.
7 Kaitano, Arthur B.
8 Faras, Mary
9 Afar, Daniel E. E.
10 Ge, Wangmao
11 Jakobovits, Aya

12 <120> TITLE OF INVENTION: NUCLEIC ACID AND CORRESPONDING PROTEIN
13 ENTITLED 121P1F1 USEFUL IN TREATMENT AND DETECTION OF CANCER
14
15 <130> FILE REFERENCE: 61158-20034.20

C--> 19 <140> CURRENT APPLICATION NUMBER: US/10/087,190
C--> 20 <141> CURRENT FILING DATE: 2003-01-28

21 <150> PRIOR APPLICATION NUMBER: US 09/779,250
22 <151> PRIOR FILING DATE: 2001-03-05
23 <160> NUMBER OF SEQ ID NOS: 69
24 <170> SOFTWARE: FastSEQ for Windows Version 4.0
25 <210> SEQ ID NO: 1
26 <211> LENGTH: 254
27 <212> TYPE: DNA
28 <213> ORGANISM: Homo Sapiens
29 <400> SEQUENCE: 1

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31 aagaaagctc ttgtcttagc ctggttctgt ctcccgtttc acatcggcca atttagctt 120
32 tctcaatgct ttctgttagg ctgcatgct ttgacttcc ctgagacaac tgagattcca 180
33 gaagctccca ctatgtttc ctgcatgaa gagcttact tggaaaagcc caataataat 240
34 tagaagtttc gata 254

41 <210> SEQ ID NO: 2
42 <211> LENGTH: 867
43 <212> TYPE: DNA
44 <213> ORGANISM: Homo Sapiens
45 <220> FEATURE:
46 <221> NAME/KEY: CDS
47 <222> LOCATION: (82)...(696)
48 <400> SEQUENCE: 1

49 acaaaatcaa aagcttccgg gctgttcccg cccctctccc caagctcggg cccgctcagg 60
50 ggaagccct ggcctccgc c atg tca aag aaa aaa gga ctg agt gca gaa 111
51 Met Ser Lys Lys Lys Gly Leu Ser Ala Glu
52 1 5 10
53 gaa aag aga aat ttt atg ata aaa ata ttt tct aaa ata aaa gat ata 159
54 Glu Lys Arg Thr Arg Met Met Val Ile Phe Ser Glu Thr Lys Asp Val
55 15 20 25
56 ttt caa tta aaa gct ttg gaa aag att tct ccc aaa gaa ggc att 207

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/087,190

DATE: 01-14-2003

TIME: 14:57:11

Input Set : N:\AMC\087190.txt

Output Set : N:\CRF4\02192003\J087190.raw

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61 Phe Gln Leu Lys Asp Leu Glu Lys Ile Ala Pro Lys Glu Lys Gly Ile
62          30          35          40
64 Act Gct atg tca gta aaa gaa gtc ctt caa agc tta gtt gat gat ggt 255
65 Thr Ala Met Ser Val Lys Glu Val Leu Gln Ser Leu Val Asp Asp Gly
66          45          50          55
68 atg gtt gac tgt qag agg atc gga act tct aat tat tat tgg gct ttt 303
69 Met Val Asp Cys Glu Arg Ile Gly Thr Ser Asn Tyr Tyr Trp Ala Phe
70          60          65          70
72 cca aat aaa gct ctt cat gca agg aaa cat aag ttg gag gtt ctg gaa 351
73 Pro Ser Lys Ala Leu His Ala Arg Lys His Lys Leu Glu Val Leu Glu
74 75          80          85          90
76 tct cag tgg tct gag gga agt caa aag cat gca agc cta cag aaa agc 399
77 Ser Gln Leu Ser Glu Gly Ser Gln Lys His Ala Ser Leu Gln Lys Ser
78          95          100          105
80 att gag aaa gct aaa att ggc cga tgt gaa acg gaa gag cga acc agg 447
81 Ile Glu Lys Ala Lys Ile Gly Arg Cys Glu Thr Glu Glu Arg Thr Arg
82          110          115          120
84 cta gaa aaa gac ctt tct tca ctt cgc gac caa agg gaa cag cta aag 495
85 Leu Ala Lys Glu Leu Ser Ser Leu Arg Asp Gln Arg Glu Gln Leu Lys
86          125          130          135
88 gca gaa gta gaa aaa tac aaa gac tgt gat cgc caa gtt gtg gaa gaa 542
89 Ala Glu Val Glu Lys Tyr Lys Asp Cys Asp Pro Gln Val Val Glu Glu
90          140          145          150
92 ata cgc cca gca aat aaa gta gcc aaa gaa gct gct aac aga tgg act 591
93 Ile Arg Gln Ala Asn Lys Val Ala Lys Glu Ala Ala Asn Arg Trp Thr
94 155          160          165          170
96 gat aac ata ttc gca ata aaa tct tgg gcc aaa aga aaa ttt ggg ttt 639
97 Asp Asn Ile Phe Ala Ile Lys Ser Trp Ala Lys Arg Lys Phe Gly Phe
98          175          180          185
100 gaa gaa aat aat att gat aga act ttt gga att cca gaa gac ttt gac 687
101 Glu Glu Asn Lys Ile Asp Arg Thr Phe Gly Ile Pro Glu Asp Phe Asp
102          190          195          200
104 tac ata ttc caaaatatcc catgggtggtg aaggatgtac aagcttgtag 736
105 Tyr Ile Asp
106          205
108 atatatgaat ttaaaactat tatctaacta agtgaactga attgtcgttt gactgtaact 796
109 ggttatatga ttttattaat gttaaataaa gtgtaaaatg caaaaaaaaaa aaaaaaaaaa 856
110 aaaaaaa a 867
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113 <21> LENGTH: 205
114 <21> TYPE: PRT
115 <21> ORGANISM: Homo Sapiens
117 <400> SEQUENCE: 3
118 Met Ser Lys Lys Lys Gly Leu Ser Ala Glu Glu Lys Arg Thr Arg Met
119 1 5 10 15
120 Met Glu Ile Phe Ser Glu Thr Lys Asp Val Phe Gln Leu Lys Asp Leu
121 20 25 30
122 Glu Lys Ile Ala Pro Lys Glu Lys Gly Ile Thr Ala Met Ser Val Lys
123 35 40 45

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/087,190

DATE: 11-19-2003

TIME: 14:57:11

Input Set: N:\AMC\087190.txt

Output Set: N:\CRF4\02192003\J087190.raw

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124 Glu Val Leu Gln Ser Leu Val Asp Asp Gly Met Val Asp Cys Glu Arg
125      50      55      60
126 His Gly Thr Ser Asn Tyr Tyr Trp Ala Phe Pro Ser Lys Ala Leu His
127 65      70      75      80
128 Ala Arg Lys His Lys Leu Glu Val Leu Glu Ser Gln Leu Ser Glu Gly
129      85      90      95
130 Ser Gln Lys His Ala Ser Leu Gln Lys Ser Ile Glu Lys Ala Lys Ile
131      100      105      110
132 Gly Arg Cys Glu Thr Glu Glu Arg Thr Arg Leu Ala Lys Glu Leu Ser
133      115      120      125
134 Ser Leu Arg Asp Gln Arg Glu Gln Leu Lys Ala Glu Val Glu Lys Tyr
135      130      135      140
136 Lys Asp Cys Asp Pro Gln Val Val Glu Glu Ile Arg Gln Ala Asn Lys
137 145      150      155      160
138 Val Ala Lys Glu Ala Ala Asn Arg Trp Thr Asp Asn Ile Phe Ala Ile
139      165      170      175
140 Lys Ser Trp Ala Lys Arg Lys Phe Gly Phe Glu Glu Asn Lys Ile Asp
141      180      185      190
142 Arg Thr Phe Gly Ile Pro Glu Asp Phe Asp Tyr Ile Asp
143      195      200      205
144 <100> SEQ ID NO: 4
145 <110> LENGTH: 1028
146 <120> TYPE: DNA
147 <130> ORGANISM: Homo Sapiens
148 <140> FEATURES:
149 <150> NAME/KEY: CDS
150 <160> LOCATION: (82)...(459)
151 <170> SEQUENCE: 4
152 caaagatcaa aagagtgccgg gcctgtccgg cccctctccc caagagcgagg ccaggccagc 60
153 gaaagccccc ggcacccggc c atg tca aag aaa aaa gga ctg agt gca gaa 111
154      Met Ser Lys Lys Lys Gly Leu Ser Ala Glu
155      1      5      10
156 gaa aag aga att ccc atg atg gaa ata ttt tct gaa aca aaa gat gta 159
157 Glu Lys Arg Thr Arg Met Met Glu Ile Phe Ser Glu Thr Lys Asp Val
158      15      20      25
159 ttt caa tta aaa gac ttg gag aag att gct ccc aaa gag aaa ggc att 207
160 Phe Gln Leu Lys Asp Leu Glu Lys Ile Ala Pro Lys Glu Lys Gly Ile
161      30      35      40
162 att gct atg tta gta aaa gaa gtc ctt caa agc tta gtt gat gat ggt 255
163 Thr Ala Met Ser Val Lys Glu Val Leu Gln Ser Leu Val Asp Asp Gly
164      45      50      55
165 arg gtc gac tat gag agg ttc gga act tct aat tat tat tgg gct ttt 303
166 Met Val Asp Cys Glu Arg Ile Gly Thr Ser Asn Tyr Tyr Trp Ala Phe
167      60      65      70
168 caa agt aaa gct ctt cat gca agg aaa cat aag ttg gag gtt ctg gaa 351
169 Pro Ser Lys Ala Leu His Ala Arg Lys His Lys Leu Glu Val Leu Glu
170      75      80      85      90
171 tct cag gac cct ggc tgc tgc ttc cat gaa ata att aaa gtc tcc tat 399
172 Ser Gln Asp Pro Gly Cys Cys Phe His Glu Ile Ile Lys Val Ser Tyr

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/087,190

DATE: 11/14/03

TIME: 14:00:13

Input File : N:\AMC\087190.txt

Output File : N:\CRF4\02192003\J087190.raw

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185          85          100          125
186 tat aag aag ttc tgc cta ggc gaa atg gct cag gcc tgt aat ccc aac 447
187 Tyr Arg Lys Phe Thr Leu Gly Ala Val Ala His Ala Cys Asn Phe Ser
188          110          115          120
189 aac tta gga ggc t tgg tggg t ggt tggg t g gac ttt ccc aac ccc ccc 448
190 Thr Leu Gly Gly
191          125
192 cat gaa atg c aad atg ggt tgt ttc ggg g aat tca aag cat gca agc tac aca aag 559
193 cat tgc aaaa gct aaaa ttt gcc gat tgc aac gga agg cga acc agc tag aaaa a 619
194 gct ttt cca ctc gaa acc aaagg aaca gct aaaa gca gaagt aaaa aata caa a 679
195 ctg tgc tcc caagt ttt ggg aaga aat ag ccagg aat aaagt agc aaga agc tgc 739
196 taa agat gg act gata ca ttt cgc aat aaa tct tgg gcc aaaa gaa aatt tgg gtt 799
197 tga aaaa at aaatt gata gaatt ttt g aatt cag aa gact tgc act acat agact 859
198 aata ttt cca tgg tgg tga ggt gtaca gct tgc aat atg taa ttt taa act att 919
199 tct aat aag tgc act gaa tgt gtt tgc ctg taa ctt gtt atc att tta tta atgt 979
200 taa taa agt gta aat tca aaaaa aaaa aaaaa aaaa 1028
201 <210> SEQ ID NO: 5
202 <211> LENGTH: 126
203 <212> TYPE: PRT
204 <213> ORGANISM: Homo Sapiens
205 <400> SEQUENCE: 5
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207 1 5 10 15
208 Met Glu Ile Phe Ser Glu Thr Lys Asp Val Phe Gln Leu Lys Asp Leu
209 20 25 30
210 Glu Lys Ile Ala Pro Lys Glu Lys Gly Ile Thr Ala Met Ser Val Lys
211 35 40 45
212 Glu Val Leu Glu Ser Leu Val Asp Asp Gly Met Val Asp Cys Glu Arg
213 50 55 60
214 Ile Gly Thr Ser Asn Tyr Trp Ala Phe Pro Ser Lys Ala Leu His
215 65 70 75 80
216 Ala Arg Lys His Lys Leu Glu Val Leu Glu Ser Gln Asp Pro Gly Cys
217 85 90 95
218 Cys Phe His Glu Ile Ile Lys Val Ser Tyr Tyr Arg Lys Phe Trp Leu
219 100 105 110
220 Gly Ala Val Ala His Ala Cys Asn Pro Ser Thr Leu Gly Gly
221 115 120 125
222 <210> SEQ ID NO: 6
223 <211> LENGTH: 1023
224 <212> TYPE: DNA
225 <213> ORGANISM: Homo Sapiens
226 <220> FEATURE:
227 <221> NAME/KEY: CDS
228 <222> LOCATION: (501)...(857)
229 <400> SEQUENCE: 6
230 aaaaaaaa aacgt tgg gct gtc aag aat ttc ccc aaagg ggg ccagg aagc 60
231 gga agccct gcc ccgcgc cat gtc aag aaaa aggc tga tgc aaga aaaa agaga 120
232 act ggc tga tga aat att ttc gaa caa aaat atat tta att aaa agatt gaa 180
233 aad att gtc cca aag aag agc att act gct at gtc taaa aagc ctt caa agc 240

```

1. *Chlorophyll a* and *Chlorophyll b* were determined by the method of Arar and Collins (1971) using a Shimadzu 1601 UV-Visible Spectrophotometer. The concentration of chlorophyll was expressed in $\mu\text{g mL}^{-1}$.

File Name : N:\AMC\087190.txt

N:\CRF4\02192003\J087190.raw

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241 ttaattgagc atttat att taaatggag aggaaggaaa atttataatta ttattagggt 70
242 tttaaatta atttttta tgaatggaaa tataaatagg attttcttta atctatggag 100
243 ccttgactgt atttccatca aaataataaa tctatatatt atagaaaaatt ctcpatgggt 150
244 acagtgcctc acccatctata tcccacaaact ttgggaagcct garmcdggga qatcacdagg 200
245 tpaatttccc taatccccaa attt arg tqt aag att gag ttg tct gag gga agt 250
246 Met Lys Cys Lys Met Glu Leu Ser Glu Gly Ser
247 1 5 10
249 caa aag cat gca agc cta cag aaa agc att gag aaa gct aaa att ggc 381
250 Gln Lys His Ala Ser Leu Gln Lys Ser Ile Glu Lys Ala Lys Ile Gly
251 15 20 25
253 cga tgt gaa acc gaa gag cga acc agg cta gca aaa gag att tct tca 629
254 Arg Cys Glu Thr Glu Glu Arg Thr Arg Leu Ala Lys Glu Leu Ser Ser
255 30 35 40
257 ett cga gac caa agg gaa cag cta aag gca gaa gta gaa aaa tac aaa 677
258 Leu Arg Asp Gln Arg Glu Gln Leu Lys Ala Glu Val Glu Lys Tyr Lys
259 45 50 55
261 gac tgt gat ccg caa gtt gtg gaa gaa ata cgc caa gca aat aaa gta 725
262 Asp Cys Asp Pro Gln Val Val Glu Glu Ile Arg Gln Ala Asn Lys Val
263 60 65 70 75
265 gcc aaa gaa gct gct aac aga tgg act gat aac ata ttc gca ata aaa 773
266 Ala Lys Glu Ala Ala Asn Arg Trp Thr Asp Asn Ile Phe Ala Ile Lys
267 80 85 90
269 tct tgg gcc aaa aga aaa ttt ggg ttt gaa gaa aat aaa att gat aga 821
270 Ser Trp Ala Lys Arg Lys Phe Gly Phe Glu Glu Asn Lys Ile Asp Arg
271 95 100 105
273 act ttt gga att cca gaa gac ttt gac tac ata gac taaaatattc 867
274 Thr Phe Gly Ile Pro Glu Asp Phe Asp Tyr Ile Asp
275 110 115
277 catggtgggtg aaggatgtac aagcttgtga atatgttaat tttaaactat tatctaacta 927
278 agtglactga atttgtgttt gcctgtacct gtgtttatca ttttattaat gttaaatataa 987
279 gtgtaaaatg caaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a 1028
281 <210> SEQ ID NO: 7
282 <211> LENGTH: 119
283 <212> TYPE: PRF
284 <213> ORGANISM: Homo Sapiens
286 <400> SEQUENCE: 7
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288 1 5 10 15
289 Leu Gln Lys Ser Ile Glu Lys Ala Lys Ile Gly Arg Cys Glu Thr Glu
290 20 25 30
291 Glu Arg Thr Arg Leu Ala Lys Glu Leu Ser Ser Leu Arg Asp Gln Arg
292 35 40 45
293 Glu Gln Leu Lys Ala Glu Val Glu Lys Tyr Lys Asp Cys Asp Pro Gln
294 50 55 60
295 Val Val Glu Glu Ile Arg Gln Ala Asn Lys Val Ala Lys Gln Ala Ala
296 65 70 75 80
297 Asn Arg Trp Thr Asp Asn Ile Phe Ala Ile Lys Ser Trp Ala Lys Arg
298 85 90 95
299 Lys Ile Gly Ile Glu Glu Asn Lys Ile Asp Arg Thr Phe Gly Ile Pro

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/087,190

DATE: 02/19/2003
TIME: 18:44:10

Input Set : N:\AMC\087190.txt
Output Set: N:\CRF4\02192003\J087190.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:29; Xaa Pos. 1,3,13